1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6

132 subject to severe droughts at times. A drought of four years' duration has recently broken in Hiva Oa, and not long ago there was one in Ua Pou that lasted seven years. The uncertainty of rainfall and these occasional droughts have affected directly the native culture.

The climate of these islands is rather subtropical than tropical. Like all the small Pacific islands that lie in the course of the trade winds, they are never torrid. At times during rains the atmosphere may be humid, but for the most part it is dry. The temperature varies only about twenty degrees the year round, approximately from 70° to 90° F. The equable climate of the group is due to the cooling of the trade winds and the tempering of the sea.

133 The Marquesas Islands are volcanic. The material is black lava, very coarse in some places and very fine grained in others; red tufa; basalt; [134] and conglomerate deposits. The rapid degeneration, crumbling, falling away, and eroding of the softer materials lead to the coasts and valley walls being precipitous, high and rugged. The harder basalt in many instances forms jagged spines. The ridges and spurs leading from the main mountainous backbone, which may be said, roughly, to traverse the mid-portion of each of the islands in the direction of its greatest length, run directly to the sea. Between them are the valleys, cut deep by the streams, which drain the mountainous interior. The charts of the Marquesas are misleading in that those regions of the islands which could not be viewed from the sea, whence the coastal surveys were made, are marked, "Plateau." There is no genuine plateau region: the interiors of all the islands are mountainous. The maximum elevations of the main islands in feet are as follows: Fatu Hiva, 3151; Tahu Ata, 3280; Hiva Oa, 3904; Ua Pou, 4040; Ua Huna, 2305; Nuku Hiva, 3890. There are no protecting coral reefs, the shores being too precipitous, although a little coral grows in the bottoms of some bays. Hence the coast is unprotected and there are few beaches. There is practically no level land either along the shores or in the valley bottoms.

The marked influence of environment on the people and on their culture may be noted briefly. The isolation of deep valleys, inacessibility by land and by sea, had much to do with the tribal development, continuous warfare, and the lack of a nationalistic tendency in political organization such as that which developed in Tonga, Tahiti, the Cook group, and Hawaii. Since the region is not suited to agricultural development, the [251 droughts and consequent famines brought about the preservation of 262] breadfruit paste in holes in the ground, breadfruit being the most prolific of all foods growing in these islands, and hence, the staple. The non-